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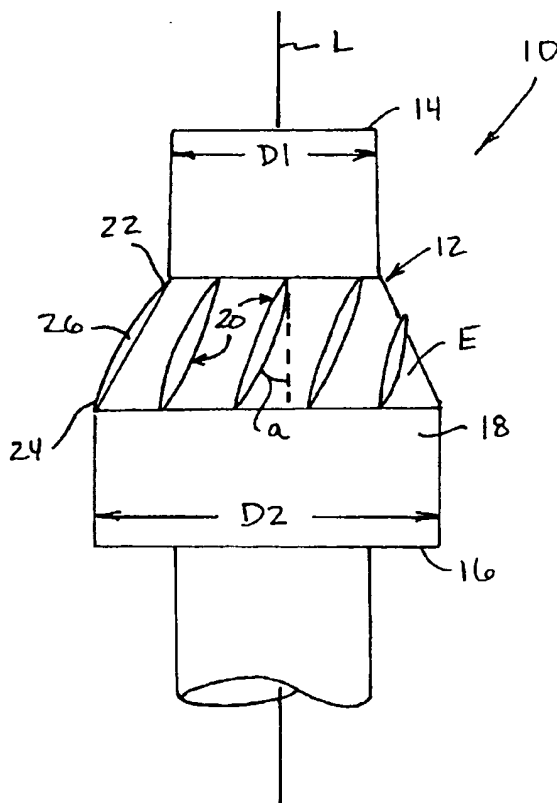
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(54) Title: ROTATING MANDREL FOR EXPANDABLE TUBULAR CASING



(57) Abstract: An expansion mandrel (10) for expanding
tubular casing includes a tapered expansion portion having
expansion segments (20) which are angularly disposed on an
external surface of the mandrel (10). The segments (20) re-
duce friction and cause the mandrel (10) to rotate in response
to the mandrel (10) being moved through the casing during
expansion of the casing.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/25715

A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,325,148 A (Trahan et al.) 4 December 2001 (04.12.2001), Fig. 9 and col. 6, lines 10-35.	1-3, 6, 9, 13-15, 17, 20
X,P	US 6,457,532 A (Simpson) 1 October 2002 (01.10.2002), Figs. 20, 22 24, and col. 12, line 27- col. 14, line 9.	1-7, 13-17, 19

Y,P		8, 10-12, 18, 21-22
X	US 1,597,212 A (Spengler) 24 August 1926, (24.08.1926), Entire document, particularly Figure 1.	1-5, 13-16

Y		8, 18
Y,P	US Patent Application Publication 2003/0075338 (Sivley), 24 April 2003 (24.04.2003), Fig. 10 and paragraph 0118 on pages 9-10.	10-12, 21, 22
X	US 3,039,530 A (Condra) 19 June 1962 (19.06.1962), Fig. 1, col. 1, lines 7-12.	1-3, 6, 9

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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